

## Abstract

The Invention provides a sample chip analyzing device and a method for analyzing the sample chip, which are capable of detecting, at high accuracy, fluorescence from marked fluorescent substances of a sample to be analyzed, which have been coupled to a sampling probe, without being influenced by pumping light of the fluorescent substance and disturbance light (noise), and efficiently analyzing the sample to be analyzed.

The invention further provides a sample chip analyzing device and a method for analyzing the sample chip, which are capable of detecting fluorescence of different wavelengths at one time and efficiently analyzing the sample to be analyzed, wherein a waveguide plate, which is able to entirely reflect incident light and guide the same, having a number of sampling probes on the surface thereof, a light source for irradiating light from the end plane of said waveguide plate to the interior thereof, a pickup member for picking up an image of the surface of said waveguide plate on which said sampling probes are fixed, wherein light is entirely reflected in the waveguide plate in which a sample to be analyzed, marked with fluorescent substances, is coupled to the sampling probes, the fluorescent substances are pumped by an evanescent wave occurring when guiding optical waves, and are caused to fluoresce, and a sample to be analyzed is able to be analyzed by an fluorescent image on the picked up surface of the waveguide plate.